R.Lockwood.

Inuss Bridge.
Patented Jec. 5, 1865. Nº 5/,328. Witnesses. Towentor Pemband Lockwood R.L. Armstrong H. Reavey

United States Patent Office.

REMBRANDT LOCKWOOD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BRIDGES.

Specification forming part of Letters Patent No. 51,328, dated December 5, 1865.

To all whom it may concern:

Be it known that I, REMBRANDT LOCKWOOD, of Brooklyn, Kings county, in the State of New York, have invented a new and Improved Cast and Wrought Iron Box-Bridge; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in combining a number of open boxes of wrought or cast iron with bands or rods of wrought-iron, keyed or bolted in such a manner as to distribute the strain over the whole bridge, after which the said boxes are filled with concrete or masonry, the superstructure to be built as the taste of the builder or the practical use of the bridge may call for.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

The arch of the bridge I make of a series of wrough or cast iron boxes made to the curve of the arch and the ends on a line of the radius-

vector of the arch, as drawn at letter A A, Drawing No. 1. These boxes are combined together with bands or rods of wrought-iron breaking joints with each other, as drawn at letter B, Drawing No. 2, and keyed, as drawn at letter C, Drawing No. 2. After the bridge is set up and fastened by keying, as drawn at letter B, Drawing No. 2, I fill the boxes with concrete or masonry, which strengthens the boxes and keeps the sides from deflecting out of line, and makes the whole arch of the bridge solid, adding great strength to the structure. The buttresses of the bridge I make in the ordinary way, of stone-work.

I claim-

The use and arrangement of wrought or cast iron boxes, combined together with bands or rods of wrought-iron fastened with keys or bolts, and filling the said boxes with concrete or masonry, in the manner above described.

REMBRANDT LOCKWOOD.

Witnesses:

R. L. Armstrong,

H. RÉAVEY.